

REMARKS

Applicant thanks the Examiner for total consideration given the present application. Claims 49-69, 71-78, 80-97, and 99-107 are currently pending of which claims 53-55, 64, 77, 78, 81-83, 92, 105, and 106 stand withdrawn as being directed to a non-elected invention that has been constructively elected by original presentation. Claims 84 and 99-101 have been amended through this Reply. Claims 49 and 84 are independent. Applicant respectfully requests allowance of the pending claims in light of the amendment and remarks presented herein.

INTERVIEW SUMMARY

Applicant thanks the Examiner and his supervisor for granting a Personal Interview with Applicant's representative on October 12, 2010. During the interview Applicant's representative explained the claimed invention and the differences between the claimed invention and the "projection and hole engagement" structure of Irwin. Applicant's representative also proposed amendments to claim 84 for further clarification of "each of the upper and lower inclined sections". Although the Examiner and his supervisor agreed that the proposed amendments would overcome the Irwin reference, Examiner cautioned that further search would be performed to determine patentability.

ALLOWABLE SUBJECT MATTER

Applicants appreciate that claims 49-52, 56-63, 65-69, and 71-76 are allowed.

REJECTION UNDER 35 U.S.C. § 112, 2ND PARAGRAPH

The Examiner has rejected claims 99-101, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claims 99-101 have been amended to address this issue. Accordingly, it is respectfully requested to withdraw this rejection.

REJECTIONS UNDER 35 U.S.C. §103

Claims 80, 84-90, 93-100, and 102-104 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshizawa et al. (U.S. Patent Publication No. 2004/0145697 A1)[hereinafter "Yoshizawa"] in view of Irwin (U.S. Patent No. 1,941,941)[hereinafter "Irwin"]. Claim 91 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshizawa in view of Irwin, and further in view of Bradley (U.S. Patent No. 738,980)[hereinafter "Bradley"]. Claims 101 and 107 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshizawa in view of Irwin, and further in view of Smith (U.S. Patent No. 2,233,434)[hereinafter "Smith"]. These rejections are respectfully traversed.

Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Additionally, there must be a reason why one of ordinary skill in the art would modify the reference or combine reference teachings to obtain the invention. A patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. *KSR Int'l Co. v Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007). There must be a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. *Id.* The Supreme Court of the United States has recently held that the "teaching, suggestion, motivation test" is a valid test for obviousness, albeit one which cannot be too rigidly applied. *Id.* Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *Id.*

In this instance, it is respectfully submitted that none of Yoshizawa, Irwin, and Smith, alone or in combination teaches or suggests all claim limitations.

For example, amended independent claim 84 recites, *inter alia*, as follows:

“a frame provided to surround an outer edge of the loading bed, wherein the frame includes the upper contact section having at least one upper inclined section and the lower contact section having at least one lower inclined section,

each of the upper and lower inclined sections being a slope of either ascending type or descending type towards a center of the loading bed,

so that, in each of the upper and lower contact sections, there is only one type of slope ascending type and descending type,

whereby the upper contact section *contacts but does not fixedly engage* the lower contact section of the upper tray and thereby enables free sliding of the upper tray on the upper contact section, and

wherein the upper contact section is *formed in a shape enabling to move back the upper tray to a standard situation* by making the lower surface of the upper tray move back on the upper contact section of the stackable substrate carrying tray *by use of gravity and inclination of the upper contact section*, when the upper tray has moved on the stackable substrate carrying tray so as to go out of the standard situation due to moving of the lower surface of the upper tray on the upper contact section of the stackable substrate carrying tray, *the standard situation being a situation wherein a center of gravity of the upper tray is positioned right above a center of gravity of the stackable substrate carrying tray.*” (Emphasis added.)

It is respectfully submitted that none of Yoshizawa, Irwin, and Smith alone or in combination, teaches or suggests the above-identified features of claim 84.

First, it is respectfully submitted that none of the applied prior art references, either alone or in combination, teaches or suggest the newly amended feature “*each of the upper and lower inclined sections being a slope of either ascending type or descending type towards a center of the loading bed, so that, in each of the upper and lower contact sections, there is only one type of slope ascending type and descending type.*”

The Examiner acknowledges that neither Yoshizawa nor Smith teaches or suggests “an upper inclined section” and “a lower inclined section” as previously claimed in claim 84. Thus, the Examiner imports Irwin to fulfill the above-noted deficiency of Yoshizawa and Smith. More specifically, in the Office Action the Examiner states with respect to Irwin as follows:

(a) “when an upper tray is removed or dislodged from a bottom tray and subsequently placed back upon the lower tray or comes back into contact with the lower tray, the inclined sections of the upper tray would slide upon the

inclined sections of the lower tray, thereby aligning the trays by use of gravity and the inclination of the contact sections”¹ ...

(b) “Irwin's inclined contact sections provide for a stable stack of trays to remain intact upon movement (Col. 1, Lines 10-16), therefore the trays are urged in a standard situation during the movement of the stack.”²

However, with respect to (a), the claimed invention deals with a situation where the stacked trays have shifted (slid) in a lateral direction when the trays have received impact. The claimed invention has no relation to such actions that someone or some event removes or dislodges an upper tray from a bottom tray and subsequently places it back upon the lower tray or makes it come back into contact with the lower tray.

With respect to (b), as the Examiner admits, the contact section of Irwin is a fixing part such as to prohibit movement of the tray even when the tray has received impact.

In the claimed invention, movement (shift, slide) of the tray is not prohibited but rather permitted when the stacked trays have received impact, and subsequently the tray moves back to the original position spontaneously.

Even though Applicants do not agree with the Examiner's above-identified allegation, claim 84 has been amended to recite, *inter alia*, “**each of the upper and lower inclined sections being a slope of either ascending type or descending type towards a center of the loading bed, so that, in each of the upper and lower contact sections, there is only one type of slope ascending type and descending type**” for further clarification of the structure of each of the upper and lower inclined sections.

Specifically, in Irwin, the projection 26a is inserted into the hole 27a, and therefore, movement of the substrate is prohibited. Such a projection has, in detail, such a shape that has a first base, an upslope, a top, a downslope and a second base in this sequence (the bases are lowest and the top is highest) so as to rise up once and subsequently fall down. Such shape

¹ See page 12, line 20 to page 13, line 3.

² See page 13, lines 3-6.

prohibits spontaneous movement of the substrate because the projection is hooked by the hole when the substrate has received impact or so.

On the contrary, in the claimed invention, the tray spontaneously starts moving when the tray has received impact or so. This is because the upper contact section and the lower contact section which contacted each other have such a shape that has only one of two types of slope (up-slope or down-slope). Specifically, though the tray of the present application has one or more slopes (inclined section), the shape of the slope(s) is not such that rises up once and subsequently falls down (or, falls down once and subsequently rises up) in the direction toward the center of the loading bed.

Even if, *assuming arguendo*, the interengaging ribs 26a and the grooves 27a of Irwin are considered to be the claimed “upper inclined section” and the “lower inclined section” (which Applicants do not admit), it is respectfully submitted that no where does Irwin teach or suggest *inter alia*, “each of the upper and lower inclined sections being a slope of either ascending type or descending type towards a center of the loading bed, so that, in each of the upper and lower contact sections, there is only one type of slope ascending type and descending type” as recited in claim 84.

Further, as previously submitted, as shown in Fig. 10B of Yoshizawa, the frame section (41f) is *as tall as* the upper contact section. Therefore, even if the upper contact section has a slope, the lower surface of the upper tray contacts the upper surface of the frame section (41f) of the lower tray when the upper tray shifts transversally. Therefore, it is respectfully submitted that Yoshizawa cannot teach or suggest “wherein the upper contact section contacts but does not fixedly engage the lower contact section of the upper tray and thereby enables free sliding of the upper tray on the upper contact section” as recited in claim 84.

Neither Irwin nor Smith fulfills the above-noted deficiency of Yoshizawa. For example, the structure of Irwin includes members 26a and 27a of a projection and a hole which fixedly engage to each other to prevent movement of a substrate. Similarly, Smith’s pilot stud 11 and pilot stud recess 9 are also members which fixedly engage to each other in order to prevent

substrate movement. Conversely, the claimed invention as amended requires that the upper contact section contacts but does not fixedly engage the lower contact section of the upper tray and thereby enables free sliding of the upper tray on the upper contact section perform the desired movement that the upper tray moves back by itself to the original position.

The Examiner acknowledges that Yoshizawa fails to teach or suggest, *inter alia*, “wherein the upper contact section is formed in a shape enabling to move back the upper tray to a standard situation by making the lower surface of the upper tray move back on the upper contact section of the stackable substrate carrying tray by use of gravity and inclination of the upper contact section, when the upper tray has moved on the stackable substrate carrying tray so as to go out of the standard situation due to moving of the lower surface of the upper tray on the upper contact section of the stackable substrate carrying tray, the standard situation being a situation wherein a center of gravity of the upper tray is positioned right above a center of gravity of the stackable substrate carrying tray.” (*Emphasis added.*)

Thus, the Examiner imports Irwin and Smith to fulfill the above-noted deficiency of Yoshizawa.

It is respectfully submitted that neither Irwin nor Smith fulfills the above-noted deficiency of Yoshizawa.

As mentioned above, the structure of Irwin includes members 26a and 27a of a projection and a hole which engage to each other in order to prevent for the substrate to begin moving. Different from claim 84 of the present invention, this structure is not such a structure that, when some impact breaks this engagement and the substrate begins moving, the substrate moves reversely by itself so as to return to the standard position.

Similarly, as mentioned above, Smith’s pilot stud 11 and pilot stud recess 9 are also members which engage to each other in order to prevent for the substrate to begin moving. Again, different from claim 84 of the present invention, this structure is not such a structure that,

when some impact breaks this engagement and the substrate begins moving, the substrate moves reversely by itself so as to return to the standard position.

Bradley has not been, and indeed cannot be, relied upon to fulfill the above-noted deficiency of Yoshizawa, Irwin, and Smith.

Therefore, for at least the above reasons, it is respectfully submitted that independent claim 84 is allowable over the applied prior art references. Dependent claims 80, 85-91, 93-97, 99-104, and 107 are allowable at least by virtue of their dependency on claim 84 and further in view of novel features recited therein.

CLAIM JOINDER

Although Applicant does not necessarily agree with Examiner's restriction requirement, claims 53-55, 64, 77, 78, 81-83, 92, 105, and 106 depend from corresponding independent claims 49 and 84. Thus, upon allowance of claims 49 and 84, joinder of claims 53-55, 64, 77, 78, 81-83, 92, 105, and 106 are respectfully requested.

CONCLUSION


All rejections raised in the Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claims does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Should there be any outstanding matters that need to Ali M. Imam Reg. No. 58,755 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Director is hereby authorized in this, concurrent, and future replies to charge any fees required during the pendency of the above-identified application or credit any overpayment to Deposit Account No. 02-2448.

Dated: October 26, 2010

Respectfully submitted,

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